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ABSTRACT

The handbook was designed to serve as a job scheduling guide and general reference for the data control section of the Southern University Computer Center (SUCC). A description of the computer operations service procedure at Southern University is provided. For each computer job catalogued and inventoried by the SUCC, a summary page is included that details job name, job code, major sub-application classifications, job description, and reference and scheduling information. Explanations of a Job Run Sheet and data element constraints are given along with a sample of each document included in an Operations Instruction Set used by computer jobs inventory and data inventories, are provided. The book also contains in appendixes a Disk "Type & Unit" Codes Table, an Application Codes Table, a Run Frequency Table, a Table of Program Execute Names, Computer Job Indexes, and a glossary. (GW)

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INSTITUTE FOR SERVICES TO EDUCATION, INC.

ED124560

A COMPUTER JOB RUN BOOK

Developed for

Southern University at Baton Rouge

January 31, 1975

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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MANAGEMENT INFORMATION SYSTEMS (MIS)

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Technical Assistance Consortium
to Improve College Services

INSTITUTE FOR SERVICES TO EDUCATION, INC.

The Institute for Services to Education was incorporated as a non-profit organization in 1965. Its initial sustaining grant came from the Carnegie Corporation. ISE is an educational research and development organization, specializing in the problems of equalizing educational opportunity. ISE is involved in the design of educational materials for students and in teaching strategies to decrease attrition among educationally neglected Black Americans.

The curriculum development work requires long term interaction with college presidents, other administrators and faculty involved in dealing with educationally neglected college entrants. ISE has developed close insights into the obvious and subtle problems of predominantly Black student populations in large and small, urban and rural settings.

The research program of ISE has been involved with annual surveys of the academic, demographic and motivational characteristics of students, with particular emphasis on entering freshmen. This has required large scale collection, management, file development and analysis of educational data from financial aid data, to income distributions, to self-concept, to perceptions of their educational environment. This experience has been instructive in the subtleties of interpreting quantitative data collected on Black populations.

MANAGEMENT INFORMATION SYSTEMS DIRECTORATE

Management Information Systems is one of the two TACTICS programs of ISE. Its goals are to improve the quality of information on the historically Black colleges and universities participating in TACTICS and through this process assist in the improvement of the information management procedures on the individual campuses. Its major accomplishments to date include: (1) The development of an automated data base which provides a manipulative capability to handle key data elements on enrollment degrees granted, and revenue/expenditures on some 113 institutions; (2) The establishment of a cooperative data collection and reporting approach between the United Negro College Fund (UNCF) and the office for the Advancement of the Public Negro College (OAPNC). This effort significantly reduces the data collection demands on the college; and (3) The sponsoring of Summer Information Management Training Institutes for college administrators and researchers responsible for data collection. Out of this program should come accurate appraisals of the Black colleges in terms of growth patterns, internal enrollment and degree patterns, patterns of financial support and trends in the growth or non-growth of that support. With the management orientation of higher education, this program is being pushed hard to become valuable to all small colleges in mastering data collection and manipulation programs which undergird sound management decision making. MIS is developing model procedures for effective data flow and management reporting. Documentation based on experiences with TACTICS institutions will be made available to all institutions in the consortium.

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This document is a product of the Management Information Systems Directorate, a component of TACTICS sponsored by the Institute for Services to Education, Inc., its Assisting Agency.

TACTICS is a unique consortium of eight (8) technical service components servicing historically Black Colleges and Universities. These components are provided personnel and technical support by their Assisting Agencies, and are:

Assisting Agency	TACTICS Components
The Institute for Services to Education (ISE)	■ Cooperative Academic Planning (CAP) ■ Management Information Systems (MIS)
The Robert R. Moton Memorial Institute, Inc.	■ Moton Consortium on Admissions and Financial Aid (MCAFA) ■ Moton College Service Bureau (MCSB)
The Phelps-Stokes Fund	■ Management Development Program (MDP)
United Board for College Development (UBCD)	■ Academic Administration (AA) ■ Educational Technology (ET)
University Associates, Inc.	■ Technical Assistance (UA)

All Assisting Agencies have programs other than their TACTICS involvements.

The unique distinction enjoyed by TACTICS (Technical Assistance Consortium To Improve College Services) stems from the continuous cooperation between the agencies, components and coordinating office where all are working together for the good of their colleges and universities. This thrust is represented by the unifying TACTICS logo displayed by all TACTICS component's publications.

TACTICS is supported by the Office of Education under its Title III Developing Institutions Program.

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MANAGEMENT INFORMATION SYSTEMS

INSTITUTE FOR SERVICES TO EDUCATION, INC.

A

COMPUTER JOB RUN BOOK

Developed for
Southern University

by
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Southern University Computer Center
Baton Rouge, Louisiana 70813

January 31, 1975

2001 S Street, N. W.
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Technical Assistance Consortium to Improve College Services

Foreword

A *Computer Job Run Book* was funded by the MIS component of TACTICS, to produce a model for efficient computer center job control. Southern University at Baton Rouge (SUBR) developed this document as an operational tool for use by their Data Control Section. As such, it contains information on all 608 jobs filed in the SUBR Computer Center.

The cost of publishing the complete 608-page document is obviously prohibitive. In addition, the description of jobs designed specifically for SUBR is of limited use to the general TACTICS audience. Therefore, we have elected to publish an abridged version which describes the contents and methodology. Greater detail may be obtained through direct contact with SUBR.

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PREFACE

With increasing demand for computer services at Southern University, the Southern University Computer Center must become more effective by increasing the productivity of its computer operations. One way to enhance productivity is to improve job scheduling and control of the work flow through data processing operations. This *Computer Job Run Book* was developed to facilitate effective job scheduling, control, and operational productivity. In addition, a complete set of computer Job Operating Instructions (one set for each of the 608 jobs inventoried in the SU Computer Center) was developed.

This project which developed these documents was supported by MIS/TACTICS. Funds from MIS to support this developmental project were significant and appreciated. The amount of dollars was not as important as the timeliness and impact of the funds.

This book was designed specifically for the data control section of data processing operations. It has general usefulness for other technical and nontechnical persons in the data processing setting.

The Data Control Section receives, verifies, and processes user job requests and input data for computer processing. Data Control schedules, arranges, and sets up jobs; it also checks, verifies, and distributes computer outputs. This publication was developed to assist Data Control in performing these very important data processing functions.

Finally, this book was designed to meet the particular current needs of computer operations at Southern University, Baton Rouge. Additionally, an attempt was made to provide a general structure and content that will serve as a practical guide to TACTICS institutions wishing to develop or improve their data processing operations. The staff of the Southern University Computer Center will be happy to assist in the latter use to the maximum extent possible.

ACKNOWLEDGMENTS

Each member of the Southern University Computer Center staff made a significant contribution to the development and completion of this project, for which we are deeply grateful. However, we are especially appreciative of and grateful to the following members of the staff for their contribution to this project: Marvin L. Allen, senior programmer analyst; Willie Marie Barrow, programmer; Mary E. Coverson, key punch operator; Elton J. DeRouen, assistant operations supervisor; Charles L. Pickens, computer operator; and Helen R. Sampey, programmer.

As a result of the support from MIS/TACTICS, the Southern University Computer Center was able to develop this *Job Run Book*, which was primarily developed for the following reasons:

- Specifically, for use by the data control section of the Southern University Computer Center in job scheduling and as a general reference.
- Generally, for use by TACTICS institutions as a recommended guide for those colleges and universities planning, or in the process of developing and/or improving, their data processing operations functions.

In addition, this book may be used as an informational and general reference document by other technical and nontechnical persons both inside and outside of a data processing center.

Functionally, the book is an operational tool for data control. Data Control is responsible for receiving, verifying, and processing user job requests and input data for computer processing. It schedules jobs and arranges job set-ups, as well as checks, verifies, and distributes computer outputs.

The *Job Run Book* provides systematic, up-to-date, detailed, and accurate information on every computer job inventoried by the computer center. The Computer Jobs Inventory accounts for each approved computer operations job processed by the computer center. Data Inventories account for all computerized files inventoried by the computer center (i.e., tape, cards, and disk data files). Job Control Language sets inventory accounts for one set of job control language cards for each computer job inventoried. The Job Description section, which is the heart of this publication, provides descriptive information about computer jobs inventoried for the purpose of job scheduling and reference. Computer Job Indexes group the computer jobs inventoried into four different orders:

a. alphabetically by *job name*
b. by *frequency of job-run* (daily, weekly, etc.)
c. by *application* classification (accounting, grades, payroll, etc.)
d. by the *program-execute-name* (AC10505, BD12350, etc.).

Hopefully, the content and organization of the information in this book will provide the Data Control section of the Southern University Computer Center with an effective operational tool which will help the section improve its performance of the duties of job receiving, scheduling, and control.

II. Special Comments

Special comments are made on the following items to enhance the appreciation of the reader for the contents of this book: definitions, operating instructions, and updating procedures.

A. Definitions

Application – is used in this book to refer to three classifications of computer jobs, according to the "end-use" function a job is designed to support:

1. *Major Application* – the broadest job classification; refers to a general subject area, e.g., accounting.
2. *Minor Application* – an intermediate level of job classification referred to as a subset of the major application, e.g., budget allotments.
3. *Sub-Application* – the lowest and most detailed level of job classification. It refers to a set of related jobs that are performed, e.g., create fund allotments. In some data processing installations, the term "Job" has the same meaning assigned in this document to "sub-application." See Appendix B for Application Codes Table.

Data – is defined as the raw material from which information is generated. Data is thought of as having the following hierarchal structure:

1. *File* – the largest subset of data representing card file, tape files, and disk files.
2. *Record* – a subset of a file representing such things as student addresses, employee payroll earnings, etc.
3. *Element* – the smallest subset of data. It is a subset of a record representing such items as name, street number, sex, etc.

Job – is used to denote a single computerized step or task required to service a user request. The number of jobs required may vary and usually requires more than one.

Example: A request for a complete set of alumni address labels in zip code order requires two jobs because the alumni file is stored in alphabetical order: (1) send file in zip code order; (2) print address labels.

Note: In some computing centers, the term "Job" has the same meaning as is assigned to "sub-application" in this document. (See Application Index in Appendix E).

B. Operating Instructions Development

A major portion of the project which produced the 608-page *Job Run Book* was directed toward developing a set of operating instructions for each computer job inventoried. Development

of the instruction sets to provide computer operators with detailed instructions for running each approved job inventoried by the Southern University Computer Center was accomplished. (See more about operating instructions in Section V.)

At Southern University, the operating instructions mentioned above are having a significant impact on operator effectiveness and operational productivity. The instructions also are used as an aid in training operational personnel.

C. Updating Procedures

Updating this book is both a manual and an automated process. Job description sheets, inventories, and indexes are updated by lining-through outdated information and writing-in corrected information; removing sheets for deletion; and adding sheets for additions. Periodically, accumulated manual updating will be computer run for a fresh hard copy and will replace the filed copy. This procedure restores the *Job Run Book* to its former updated status.

To perform any updating on the contents of this book, a request for updating must be submitted to the Director of the Computer Center by the person(s) requiring the update, such as the data control clerk, operator, programmer, or external user. The request must indicate the nature of the changes and the reason(s). The director reviews requests for approval action.

III. Computer Operations Service Procedure at Southern University

The processing of a job through the Southern University Computer Center is accomplished in eight steps. These steps begin with the initiation of a Service Request and are concluded with the delivery of the requested service. These steps are accompanied by a monitoring and control function, which is simply the ability to determine the status and location of a job or a service request within one minute. Monitoring and control affords the capability of altering and/or rescheduling a job prior to its entering the computer processing step.

This section outlines the computer Operations Services Procedures and includes a flow chart depicting the progression of a job through the computer center. (See Figure 1) The outline gives the step name, followed by the computer center section that has responsibility for the step.

1. *Initiation of Service Request* (Data Control Section): Method of requisitioning computer services from the S.U. Computer Center. Requests for services may be initiated in the following ways:

    a. Service Request form completed by user (See Figure 2)
        1. Regular (single) request
        2. Standing (automatic cyclic initiation) request
    b. Authorized "phone-in" request by user
    c. Automatic Standing Request
    d. Internal (computer center) Request – See (a) above.

2. *Processing of Service Request* (Data Control Section): Internal processing required before a request can be scheduled. The operations involved are:

    a. Checking request forms for completeness
    b. Coding request forms with:
        1. Job request number
        2. Job code
        3. Etc.
    c. Securing required recommendations and approvals
    d. Registering (logging-in) request
    e. Spot checking related data for completeness, orderliness, and accuracy
    f. Using the four computer job indexes in the run book to determine whether or not the requested job is inventoried. The job code is assigned if the job is in the inventory.

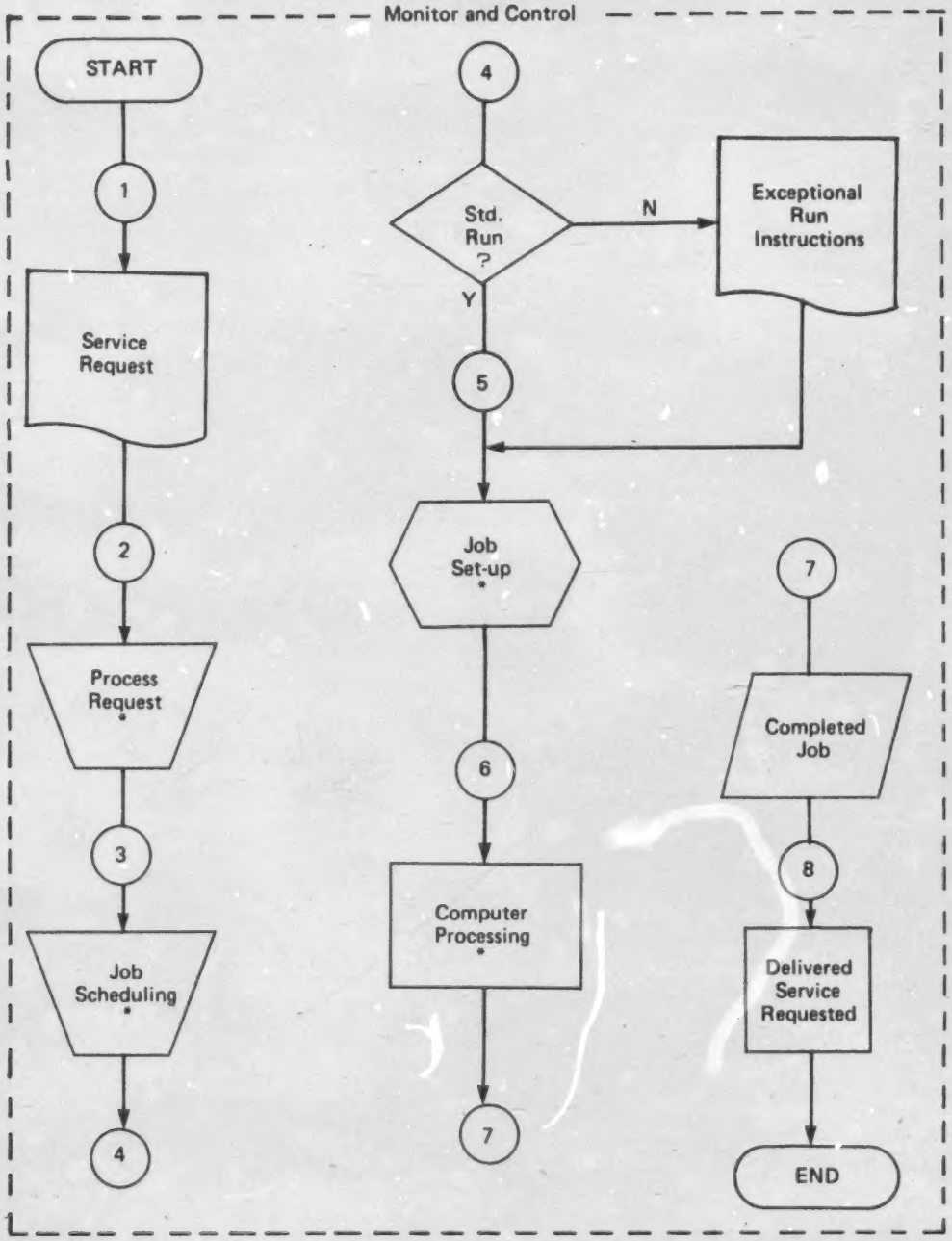

Figure 1. Computer Operations Service Procedure

*The Computer Run Book or Operating Instructions are used in these steps (see detailed explanations of flow chart.

SERVICE (SVC) REQUEST
Southern University Computer Center

Request No. 0127

DATE: 1-31-75 TIME: 8:15 AM

REQUESTED BY: (Name & Title):	Requested for (Dept, Ofc, Grant, etc.)	Acct No.	Phone
CHAPMAN, REGISTRAR	REGISTRAR'S OFFICE	1104	5050

TYPE OF SVC

- ☐ Change to Existing Svc
- ☑ Delivery of Existing Svc
- ☐ New, Recurring
- ☐ New, one-time
- ☐ Svc Cancellation
- ☐ Other Svc

TYPE OF WORK

System:
- ☐ Study & Analysis
- ☐ Design

Programming:
- ☐ New
- ☐ Modify Existing

Operations:
- ☑ Computer Run
- ☐ Data Preparation

NAME OF SVC

(Let name be descriptive): RVR FALL, 1974 INCOMPLETE GRADE

Desired Delivery Schedule: 2-4-75

DESCRIPTION OF SVC (attach extra sheets if needed). Give a clear, simple indication of need and use that laymen can understand.

LIST ALL INCOMPLETE GRADES FOR THE FALL 1974 SEMESTER ON 2-PART STOCK PAPER

TO BE COMPLETED BY COMPUTER CENTER

SECTION REVIEW: ACTIVITY:	EST TIME	EST COST	RECOMMEND YES	RECOMMEND NO	INITIAL
			☐	☐	
			☐	☐	
			☐	☐	
TOTAL					

RECOMMENDATION OF PROJECT LEADER:

Yes* ☐ No ☐ Signature _____ Date _____

DIRECTOR APPROVAL: Delivery Date

YES Yes/No _____ Signature 1-31-75 Date

TO BE COMPLETED BY REQUESTING DEPARTMENT

APPROVAL OF: DELIVERY DATE	SERVICE COST	APPROVAL OF SERVICE DELIVERED
☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
DEPT HEAD:	DATE:	DEPT. HEAD: DATE:

*Attach Applicable SYSTEM and/or PROGRAM Estimates.

Figure 2. Service (SVC) Request Form

3. *Scheduling Computer Jobs* (Operations Section): Prioritizing the execution of computer job run during a specified time frame. Scheduling will be the responsibility of operations shift supervisors. Factors considered by supervisors in determining the order in which jobs will be run on a given shift are ranked below:

    a. Delivery deadline
    b. Time request received
    c. Run time required
    d. Resources required
        1. tape files
        2. forms
        3. memory
    e. Frequency of job
    f. User
    g. Judgment.

4. *Exceptional Run Form* (Data Control and Operations Sections): This form is executed only when it becomes necessary for computer operators to deviate from standard operating instructions in order to fill a request. (See Figure 3)

5. *Job Set-Up* (Operations Section): Essential elements required to run scheduled computer jobs are assembled on a work table in an area provided near the computer. The essential elements required are:

    a. Operating Instructions (Exception Run attached if required)
    b. Data file(s)
    c. Forms (if nonstandard)
    d. JCL Set
    e. Approved Service Request.

    Operating instructions are used to determine the following: data files (b); forms required (c); and JCL (Job Control) sets (d).

6. *Computer Processing* (Operations Section): This is the job execution step covering the actual computer processes required to produce the services requested. (See Operating Instructions, Section V)

7. *Disposition of Completed Job* (Data Control Section): This may be referred to as the Job "Wrap-up" step, covering the span between completion of computer operations and delivery of finished product. Activities required in this step include:

    a. Cleaning up output
    b. Spot checking results, verifying controls, etc.

Run Exception

(to Job Run Sheet–Operating Instructions)

FORM*

"See SAMPLE entry below"

Exception and Codes

(Check each applicable one)

- ☐ FORMS required – 1
- ☐ FILES required – 2
- ☐ OUTPUT format, etc. – 3
- ☐ OTHER exception(s) – 4

Job Code JO1830

Job Name Example (E) Grades

Scheduled Run Date 1/31/75

*Use for this single run only

Code	Describe exception to operating instructions
1	USE 2-PART STOCK PAPER Instead of Indicated Form

Authorized by:

Date: 1-31-75

Figure 3. Run Exception Form

c. Stacking and labeling outputs

d. Restoring set-up items to file

e. Notifying user of completion.

8. *Delivery of Requested Services* (Data Control Section): As the name implies, the transfer of possession of completed output from computer center to user takes place in this step. This transfer may occur in the following ways:

a. User pick up at Center

b. User agent pick up at Center

c. Center delivers to user

d. Other.

IV. Job Descriptions

The Job Descriptions section represents the main content and is the heart and bulk of the *Job Run Book.* A Job Description Sheet is filed for each computer job inventoried and cataloged by the Southern University Computer Center. The descriptions are one-page summaries of inventoried jobs ordered sequentially by job code. Each summary page includes the job name, job code, and the major sub-application classifications. It also contains a "Brief" fully describing what the job does, as well as reference and scheduling information. Each of the four computer job indexes (See Appendix E) points to the Job Description for every referencing of the job code.

This section explains the Job Description Sheet, provides data element constraints (Table 1), and includes a sample sheet on seven major application categories.

Table 1: Job Description Sheets
Data Element Constraints

Content	Maximum Lines	Maximum Length
Job Name	1	34
Job Code	1	6
Major Application	1	22
Sub-Application	1	34
Brief	*	69
As of date	1	8
Program Execute Name	1	8
Source Program File No.	1	5
Programmer	1	10
JCL (Job Control) Set Code	1	6
Printer Forms	1	34
User(s)	1	21
Run Frequency	1	14
Run Time (min.)	1	4
I/O File Names	*	69

*Denotes there is no limit on the number of lines used in these sections.

Description

A Job Description Sheet summarizes the most important element of a computer job. The following information is found on each job description sheet.

Descriptive Information:

A. Job Name–A phrase or sentence describing the job.
EXAMPLE: PRINT I-GRADES REPLACEMENT GRADES

B. Job Code–A 5-digit number preceded by the letter "J."
EXAMPLE: J01830

C. Major Application–Name of the major application classification is printed in this area (See Appendix B).
EXAMPLE: GRADES

D. Sub-Application–Name of the sub-application classification is printed in this area (See Appendix B).
EXAMPLE: INCOMPLETE (I) GRADES

E. Brief–A short, clear, concise explanation of a job. Describes what the job does, as well as what the results of the job should be.
EXAMPLE: THIS JOB PRINTS STUDENT GRADE REPORTS OF GRADES COMPLETED AND REPORTED BY INSTRUCTORS WHO ISSUED "INCOMPLETE" GRADES FOR THE SEMESTER FINAL. THESE GRADES WHICH REPLACE I-GRADES IN STUDENT RECORDS, ARE REPORTED ON THE STANDARD FORM INDICATED.

Reference Information:

A. As-of-date–Date the current job description was filed.

B. Program execute name–The system library name of the computer program required to run (execute) job.

C. Source Program File Number–Each source program is assigned a number for filing and referencing source program decks.

D. Programmer–Name of the person who developed and documented the program, including the job run instructions, is entered here.

Scheduling Information:

A. JCL (Job Control Language) Set Code–Each job requires a JCL set for execution. The file code entered here has the same number as the related job code. The difference in the code is the "S" prefix instead of the "J" in job code.

B. Printer Forms–Form numbers, names, and descriptions as applicable

C. User(s)–The office that originally requested the computer run, which required the establishment of this job.

D. Frequency–Normal recurring cycle of a job.

E. Run Time–The average number of minutes required for computer processing during typical execution of a job.

F. I/O (Input/Output) File Names–Each file (card, tape, disk, printer) used in processing a given job is shown with file name, status, type, and job code of job where file was generated if applicable.

Samples

Figures 4-10 contain a sample Job Description Sheet for each major application category.

The categories are:

- Accounting (Figure 4)
- General Administration (Figure 5)
- Grade Reporting (Figure 6)
- Inventory (Figure 7)
- Other (Figure 8)
- Payroll (Figure 9)
- Registration (Figure 10)

JOB DESCRIPTION SHEET

JOB NAME--PRINT NDSL RE-PAYMENT SCHEDULES JOB CODE--J01090

MAJOR APPL-- ACCOUNTING SUB APPL-- NDSL RE-PAYMENT SCHEDULES-EXITS

BRIEF

THIS JOB PREPARES NDSL RE-PAYMENT SCHEDULES FOR STUDENTS (EXISTS) WHOSE NATIONAL DEFENSE LOAN ACCOUNTS ARE BEING CLOSED. SCHEDULES SHOW PAYMENTS ON BOTH QUARTERLY AND ANNUAL PLANS. THESE SCHEDULES ARE USED DURING EXIT INTERVIEWS WITH STUDENTS TO GIVE THEM AN OPTION OF SELECTING EITHER THE QUARTER OR ANNUAL PLAN.

REFERENCE INFORMATION

A)	AS OF DATE	01/31/75
B)	PROGRAM EXECUTE NAME	FA12017
C)	SOURCE PROGRAM FILE NO	C0330
D)	PROGRAMMER	BROWN

SCHEDULING INFORMATION

A)	JCL SET CODE	S01090
B)	PRINTER FORMS	REG-STOCK, 2-PT-10
C)	USER(S)	COMPTROLLER'S OFFICE
D)	RUN FREQUENCY	SEMESTERLY
E)	RUN TIME (MIN)	0012
F)	I/O FILE NAMES	
	CARD - NDSL EXITS	(I)
	PRINTER - NDSL RE-PAYMENT SCHEDULES	(O)

Figure 4. Job Description Sheet-Accounting

JOB DESCRIPTION SHEET

JOB NAME--PRINT ALUMNI ROSTER JOB CODE--J01520

MAJOR APPL-- GENERAL ADMIN SUB APPL-- ALUMNI REPORTING

* * * \

JOB DESCRIPTION SHEET

JOB NAME--PRINT I-GRADES REPLACEMENT GRADES JOB CODE--J01830

MAJOR APPL-- GRADES SUB APPL-- INCOMPLETE (I) GRADES

BRIEF

THIS JOB PRINTS STUDENT GRADE REPORTS OF GRADES COMPLETED AND REPORTED BY INSTRUCTORS WHO ISSUED 'INCOMPLETE' GRADES FOR THE SEMESTER FINAL. THESE GRADES, WHICH REPLACE I-GRADES IN STUDENT RECORDS, ARE REPORTED ON THE STANDARD FORM INDICATED.

REFERENCE INFORMATION

A)	AS OF DATE	01/31/75
B)	PROGRAM EXECUTE NAME	GR13013
C)	SOURCE PROGRAM FILE NO	C0143
D)	PROGRAMMER	SMITH

SCHEDULING INFORMATION

A)	JCL SET CODE	S01830
B)	PRINTER FORMS	STUDENT GRADE REPORT
C)	USER(S)	REGISTRAR'S OFFICE
D)	RUN FREQUENCY	SEMESTERLY
E)	RUN TIME (MIN)	0025

F) I/O FILE NAMES

TAPE-INCOMPLETE GRADES (SORTED VERSION-J01820)	(I)
DISK-CURR SEM STUDENT MASTER (TEMPORARY COPY-J01790)	(I)
DISK-WORK AREA	(I/O)
PRINTER-STUDENT I-GRADE REPORT FORMS, SEM, YEAR	(O)

Figure 6. Job Description Sheet-Grades

JOB DESCRIPTION SHEET

JOB NAME--PRINT C/S REQUISITION REPORT JOB CODE--J02250

MAJOR APPL-- INVENTORY

SUB APPL-- CENTRAL STORES INVENTORY REPORTS

BRIEF

THIS JOB PRINTS A CENTRAL STORES REQUISITION REPORT FROM THE CENTRAL STORES INVENTORY FILE. THIS REPORT IS RUN IN TRANSMITTAL ORDER EACH TIME THE CENTRAL STORES INVENTORY REPORT IS RUN, SHOWING THE NUMBER AND QUANTITY OF ITEMS FOR EACH TRANSMITTAL PREPARED FOR THE CENTRAL STORES INVENTORY ACCOUNT.

REFERENCE INFORMATION

A)	AS OF DATE	01/31/75
B)	PROGRAM EXECUTE NAME	INV13512
C)	SOURCE PROGRAM FILE NO	C0243
D)	PROGRAMMER	SMITH

SCHEDULING INFORMATION

A)	JCL SET CODE	S02250
B)	PRINTER FORMS	REG-STOCK, 2-PT-14
C)	USER(S)	CENTRAL STORES
D)	RUN FREQUENCY	WEEKLY
E)	RUN TIME (MIN)	0004
F)	I/O FILE NAMES	
	TAPE – CENTRAL STORES INVENTORY (SORTED VERSION–J02240)	(I)
	PRINTER – CENTRAL STORES REQUISITION REPORT MM/DD/YY	(O)

Figure 7. Job Description Sheet–Inventory

JOB DESCRIPTION SHEET

JOB NAME--ELECTRONIC CIRCUIT ANALYSIS PROG JOB CODE--J02280

MAJOR APPL-- OTHER

SUB APPL-- PROGRAM COMPILATIONS

BRIEF

THIS JOB COMPILES PROGRAMS AND EXECUTES AN ENGINEERING ANALYSIS PROGRAM PROCEDURE. THE COMPILER ROUTINE IS USED BY ENGINEERING FACULTY AND STUDENTS.

REFERENCE INFORMATION

A)	AS OF DATE	01/31/75
B)	PROGRAM EXECUTE NAME	ECAP
C)	SOURCE PROGRAM FILE NO	T0800
D)	PROGRAMMER	IBM

SCHEDULING INFORMATION

A)	JCL SET CODE	S02280
B)	PRINTER FORMS	REG-STOCK, 1-PT-14
C)	USER(S)	STUDENT I/O ROOM
D)	RUN FREQUENCY	DAILY
E)	RUN TIME (MIN)	0020
F)	I/O FILE NAMES	
	DISK – SYSTEM LINKAGE LIBRARY	(I)
	DISK – SYS PRIVATE CORE–IMAGE LIB	(I)
	CARD – ECAP JCL WITH DATA CARDS	(I)
	PRINTER – ECAP OUTPUT LISTING	(O)

Figure 8. Job Description Sheet–Other

JOB DESCRIPTION SHEET

JOB NAME--PRINT P/R DISBURSEMENT REPORT I-L JOB CODE--J03060

MAJOR APPL-- PAYROLL

SUB APPL-- PAYROLL VOUCH/DISBURSEMENT REPORT

BRIEF

THIS JOB PRINTS A P/R DISBURSEMENT REPORT WHICH REFLECTS ONLY ONE COLUMN OF ACTIVITY. THIS REPORT IS IDENTICAL TO THE REPORT IN J03050 EXCEPT IT ONLY SHOWS THE AMOUNTS PAID TO EACH EMPLOYEE. A DECK OF DISBURSEMENT CARDS ARE PUNCHED TO BE USED IN THE ACCOUNTING SYSTEM. A DISK FILE IS ALSO CREATED TO BE USED IN PREPARING EMPLOYEE ATTENDANCE SHEETS.

REFERENCE INFORMATION

A)	AS OF DATE----------	01/31/75
B)	PROGRAM EXECUTE NAME----	PR14012
C)	SOURCE PROGRAM FILE NO ---	C0051
D)	PROGRAMMER----------	CAREY

SCHEDULING INFORMATION

A)	JCL SET CODE----------	S03060
B)	PRINTER FORMS----------	REG-STOCK, 4-PT-10
C)	USER(S)----------	COMPTROLLERS OFFICE
D)	RUN FREQUENCY----------	BI-WEEKLY
E)	RUN TIME (MIN)----------	0004
F)	I/O FILE NAMES	
	TAPE - P/R DISBURSEMENT & ATTEND FILE (MONTHLY-J03050)	(I)
	CARD - P/R INVOICE DISBURSEMENTS (UPDATED VERSION-J03060)	(O)
	DISK - P/R DED&EXTRA REG. REC. (UPDATED VERSION-J03060)	(O)
	PRINTER - P/R DISBURSEMENT REPORT (1-LINE)	(O)

Figure 9. Job Description Sheet-Payroll

JOB DESCRIPTION SHEET

JOB NAME--UPDATE UNIV. SCHED W/STU SCHEDULES JOB CODE--J04380

MAJOR APPL-- REGISTRATION

SUB APPL-- CLASSROLLS CHECK-IN/OUT ROSTER

BRIEF

THIS JOB IDENTIFIES ALL CLASSES IN THE UNIVERSITY MASTER SCHEDULE THAT HAVE STUDENTS ENROLLED. ALSO, IT PLACES THE TOTAL STUDENTS ENROLLED IN EACH CLASS IN THE UNIVERSITY MASTER SCHEDULE FILE.

REFERENCE INFORMATION

A) AS OF DATE---------- 01/31/75
B) PROGRAM EXECUTE NAME------ SR15546
C) SOURCE PROGRAM FILE NO----- C0280
D) PROGRAMMER---------- BARROW

SCHEDULING INFORMATION

A) JCL SET CODE---------- S04380
B) PRINTER FORMS---------- REG-STOCK, 1-PT-14
C) USER(S)---------- REGISTRAR OFFICE
D) RUN FREQUENCY---------- SEMESTERLY
E) RUN TIME (MIN)---------- 0006
F) I/O FILE NAMES
TAPE - STUDENT REGISTRATION SCHEDULES (KEY ORDER-J04330) (I)
DISK - CURR SEM UNIV SCHEDULE (UPDATED VERSION-J04380) (O)

Figure 10. Job Description Sheet-Registration

V. Operator Aids

The forms, documents, and samples described in this section are tools used by computer operators to assist them in effective performance, control, and productivity in their work. In addition, this section describes the contents of a Job Run Sheet, gives the data element constraints, and shows a sample of each document included in an Operating Instruction Set that is used by a computer operator at Southern University.

Operating Instructions

Operating Instructions were developed along with, but separate from, the *Job Run Book*. The purpose of the instructions is to provide computer operators with detailed instructions for running computer jobs required to fill approved service requests. Operating instructions are filed by Job Code in what is called a Job Run File. The file is composed of individual sets of operating instructions for each inventoried computer job.

The Operating Instructions are used primarily by operators. However, in conjunction with the *Job Run Book*, instruction sets also are used by data control in the task of job set-up. Appropriate Operating Instruction Sets are pulled from the Job Run File by the data control clerk, and are assembled together with related JCL sets, data files, and job request forms to be used by operators in computer processing. Job set-up is a responsibility of data control. Both the *Job Run Book* and Operating Instructions play significant roles in carrying out this responsibility.

Job Run Sheet

The operating instructions on Job Run Sheets provide computer operators with detailed instructions for running computer jobs. Following the instructions given, a new operator can run the job required with few, if any, additional instructions. The following information is contained on each Job Run Sheet. Constraints on the length of various data elements is provided in Table 2:

As-of-Date–Date the current run sheet was filed.
Example: 01/31/75

Job Code–A 5-digit number preceded by the Letter "J."
Example: J01830

Job Name–A phrase or sentence describing the job.
Example: Print I-Grades Replacement Grades

Table 2: Job Run Sheet
Data Element Constraints

Content	Maximum Lines	Maximum Length
Job Code	1	6
Job Name	1	34
Program Name	1	8
Application	1	34
Run Frequency	1	14
Programmer	1	10
Run Time	1	4
Language	1	30
Source Program File No.	1	5
Printer Forms	1	37
Lines Per Inch	1	1
Printer Alignment	1	34
Carriage Control	1	8
Design User	1	21
I/O File Names	*	69
Job Description	*	69
Operator Instructions	*	69
Job Control Cards Required	*	69
Operator Messages	*	69
Operator Notes	*	69

*Denotes there is no limit on the number of lines used in these sections.

Program Execute Name–The system library name of the computer program required to run (execute) job.
Example: GR13013

Sub-Application–Name of the sub-application classification (See Appendix B).
Example: Incomplete (I) Grades

Frequency–The normal recurring run cycle of a job.
Example: SEMESTER

Programmer–Name of the person who developed and documented the program, including the job run instructions.
Example: SMITH

Run Time–Average number of minutes required for computer processing during a typical execution of a job.
Example: 0025

Language–Computer programming language in which the program required to run the job was written.
Example: COBOL

Source Program File Number–Each source program is assigned a number for filing and referencing source program decks.
Example: C0143

Printer Forms–Form numbers, names, and descriptions as applicable.
Example: Student Grade Report

Lines Per Inch–Indicates the number of lines (6 or 8) to be printed per inch, which is controlled by the setting of a switch on the printer.
Example: 8

Printer Alignment–Describes the exact point on the printer to position initial form before starting the printer, in order to assure accurate point alignment.
Example: POS. 30-32 is inside of year column.

Carriage Control–Identifies the printer forms control buffer program executed to control carriage function, such as form skipping, overflow, and ejection.
Example: FCBJ0135

Designed (DSGN) User–The person or office for which the job was originally developed or to which it was subsequently assigned. I/O (Input/Output) File Names–Each file (card, tape, disk, printer) used in processing a given job is shown with file name, status, type, and job code of job where file was generated if applicable.
Example: TAPE – Incomplete Grades (Sorted Version-J01820) (I)
DISK – Curr Sem Student Master (Temp. Copy-J01790) (I)
PRINTER – Student I-Grade Report Forms Sem., Yr. (O)
DISK – Work-Area (I/O)

Job Description–This is a short, clear, concise explanation of a job, explaining what the job does, as well as what the results of the job should be.
Example: This job prints student grade reports of grades completed and reported by instructors who issued "incomplete" grades for the semester final. These grades, which replace I–Grades in student records, are reported on the standard form indicated.

Operator Instructions–Step-by-step instructions to be followed by the operator.
Example: Mount tape – Incompleted Grades (Sorted) on 280
Mount and align grade report forms on printer
Load JCL Set 01830
Record on the request form the total number of reports printed

JCL (Job Control Language) Set–Each job requires a JCL set for execution. The file code entered here has the same number as the related job code. The difference in the code is the "S" prefix instead of the "J" as in the job code.
Example: //JOB S01830 Print I-Grade Report Forms
//Exec Sysbufld
/*
//TLB SYS 015, "STUDENT-SCHED"
//DLBL SYS006, "KIT MASTER", 79, 365, ISE

```
//EXTENT SYS006, SYSWRK, 4, 1, 3012, 12
//EXTENT SYS006, SYSWRK, 1, 2, 3024, 1260
//EXTENT SYS006, SYSWRK, 2, 3, 4320, 60
//EXEC GR13013
/*
/ 1&
```

Operator Messages–This section shows console messages displayed during the execution of a job, and the action an operator should take in response to each message displayed.

Example: C/D – Load Procedure Switches
O/R – 10000100
C/D – Load Date NNXXXXXX
O/R – 74 Spring
C/D – Key in -1- not to update CUM. AV.
O/R – Ø

Operator Notes–This area is reserved for special notes and memoranda to operators. Comments or reminders concerning known future program changes required may be entered here.

Example: When keying-in date, use all the available positions. Fill in with spaces until the console returns to the left of the screen if date does not take all positions allowed.

Instructional Documents

When a Service Request reaches the computer processing step, certain documents have been retrieved and used, along with the job request, to arrive at this point. These documents and their functions are listed below. A sample of each document is included. The Figure number is provided in parenthesis.

Job Stream Sheet (Figure 11)–This sheet is used during set-up to record all the computer jobs needed to complete the Service Request. The jobs are to be used in the sequence listed. The sheet provides for checking the computer system resources needed to execute each job.

Job Run Sheet (Figure 12)–Described earlier in this section.

Job Flow Chart (Figure 13)–The flow chart provides a pictoral representation of the system resources required to execute a job.

Job Sample Output (Figure 14)–The output provides the operator with a reference for determining whether or not program execution and output are proceeding satisfactorily.

JOB STREAM DATE 01 | 31 | 75
MM DD YY

SUB-APPLICATION INCOMPLETE (I) GRADES

NO.	JOB CODE	SYSRDR	SYSPCH	SYSLST	DISKS			TAPES					COMMENTS
		OOC	OOD	OOE	160	161	162	280	281	BG	F1	F2	
1	J01780	X						X					
2	J01790						X		X				
3	J01800						X		X				
4	J01810						X	X	X				
5	J01820						X	X	X				
6	J01830						X	X	X				
7													
8													
9													
10													

NOTES: _____

Figure 11. Job Stream Sheet

S U COMPUTER CENTER JOB RUN SHEET DATE 01/31/75

JOB CODE-- J01830
JOB NAME---- PRINT I–GRADE REPORT FORMS
PROGRAM NAME-- GR13013 APPLICATION– INCOMPLETE (I) GRADES
RUN FREQUENCY-- SEMESTER PROGRAMMER-- SMITH RUN TIME-- 0025
LANGAUGE--COBOL SOURCE PROG. FILE NO-- 00143
PRINTER FORM-- STUDENT GRADE REPORT LINES PER INCH-- 8
PRINTER ALIGNMENT-- PDS 30-32 INSIDE OF YEAR COLUMN
CARRIAGE CTL.-- FCBJC135 DSGN USER-- REGISTRAR'S OFFICE

I/O FILE NAMES (INCLUDE FILE TYPE -- DISK, TAPE, CARD, PRINTER, ETC.)

TAPE – INCOMPLETE GRADES (SORTED VERSION – J01820)	(I)
DISK – CURR SEM STUDENT MASTER (TEMPORARY COPY – J01790)	(I)
PRINTER – STUDENT I–GRADE REPORT FORMS SEM, YEAR	(O)
DISK – WORK-AREA	(I/O)

JOB DESCRIPTION (CLEAR, NON-TECHNICAL STATEMENT WHICH DEFINES JOB)

THIS JOB RECORDS COURSE DESCRIPTION, GRADES, HOURS AND GRADE POINTS EARNED BY STUDENTS WHO MAKE UP INCOMPLETE GRADES RECEIVED DURING THE REGULAR GRADE REPORTING. THE REPORTS ARE PRINTED ON PRE-PRINTED GRADE REPORT FORMS.

OPERATOR INSTURCTION (PRE-RUN CONDITIONS, ABNORMAL ECJ PROCEDURE)

MOUNT TAPE – INCOMPLETE GRADES (SORTED VERSION) ON 280
MOUNT AND ALIGN GRADE REPORT FORMS ON PRINTER
LOAD JCL SET S01830

Figure 12. Job Run Sheet

S U COMPUTER CENTER JOB RUN SHEET DATE 01/31/75

OPERATOR INSTURCTION (PRE-RUN CONDITIONS, ABNORMAL ECJ PROCEDURE)

FOLLOW NORMAL OPERATING PROCEDURE.

RECORD ON REQUEST FORM THE NUMBER OF MASTER RECORDS FOUND AND THE TOTAL FORMS PRINTED WHEN DISPLAYED ON DISPLAY UNIT AT THE END OF JOB.

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

JOB CONTROL CARDS REQUIRED

```
// JOB S01830 PRINT I-GRADE REPORT FORMS
// EXEC SYSBUFLD
  FCB SYS012,FCBJ0135,NULMSG
/*
// ASSGN SYS007,X'162'
// ASSGN SYS015,X'280'
// TLBL SYS015,'STUDENT-SCHED'
// TLBL SYS016,'AVERAGE PACK'
//DLBL SYS006,'KIT MASTER',79/365,ISE
// EXTENT SYS006,SYSWRK,4,1,3,12,12
// EXTENT SYS006,SYSWRK,1,2,3024,1296
// EXTENT SYS006,SYSWRK,2.3.4320,60
// DLBL SYS007,'REGISTRATION',67/335,SD
// EXTENT SYS007,SYSWRK,,,4380,360
```

Figure 12. Continued

S U COMPUTER CENTER JOB RUN SHEET DATE 01/31/75

JCB CONTROL CARDS REQUIRED

// EXEC GR13013
/*
/&

OPERATOR MESSAGES (CONSOLE DISPLAYS AND RESPONSES)

C/D – LOAD PROCEDURE SWITCHES
O/R – 10000100
C/D – LOAD DATE NNXXXXXX
O/R – EXAMPLE – 74 SPRING
C/D – KEY IN –I– NOT TO UPDATE COM AVG
O/R – O
C/D – KEY ON –I– NOT TO PRINT STATUS
O/R – O
C/D – KEY IN –I– NOT TO UPDATE ACADEMIC STATUS
O/R – O
C/D – KEY IN –I– FOR START OPTION
O/R – O
C/D – NO MASTER RECORDS FOUND
MASTER RECORD FOUND
TOTAL FORMS

OPERATOR NOTES (FUTURE PROGRAM AND OPERATIONAL CHANGES REQUIRED)

NOTE – WHEN LOADING THE DATE, USE ALL AVAILABLE POSITIONS. FILL IN WITH THE SPACE BAR UNTIL THE CONSOLE RETURNS TO THE LEFT OF SCREEN.

Figure 12. Continued

JO1830

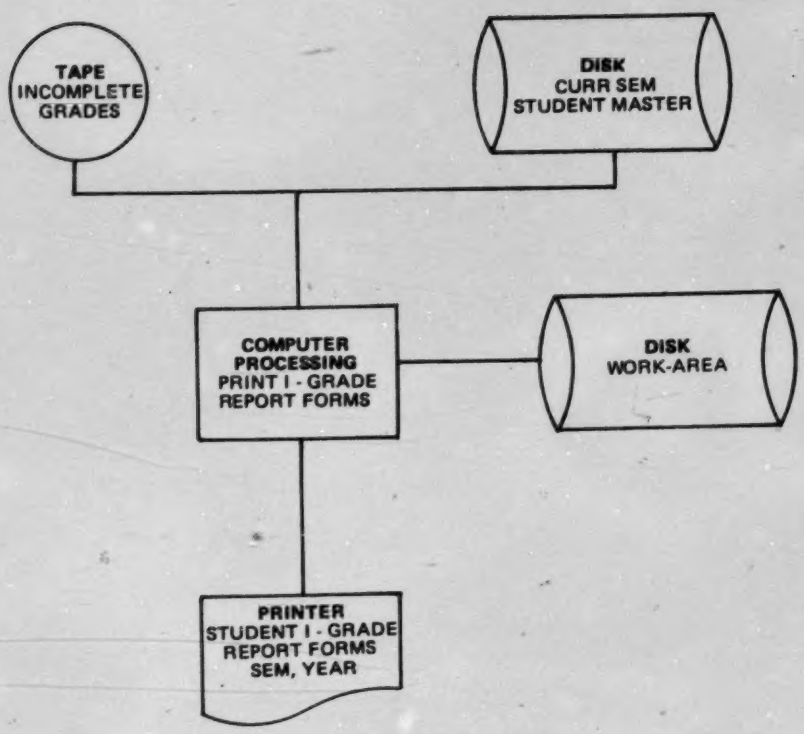

Figure 13 Job Flow Chart

SOUTHERN UNIVERSITY

OFFICE OF THE REGISTRAR

BATON ROUGE, LOUISIANA 70813

C. H. CHAPMAN, Registrar

STUDENT GRADE REPORT

GRADES

A Excellent — AU Audit
B Good — P Passing
C Fair — I Incomplete
D Passed — WP Withdrew Passing
F Failure — WF Withdrew Failing

SEMESTER LEGEND

1 Fall Semester — 3 Summer Session
2 Spring Semester

MR CHARLES L PICKENS
1170 VILLAGE PARK DR
BATON ROUGE LA 70810

YEAR	SEMESTER	STUDENT NO	CLASSIFICATION	MAJOR AND COURSE

KEY	COURSE TITLE	NUMBER	GRADE	HOURS CARRIED	HOURS EARNED	HOURS FAILED	GRADE POINTS
5600	FARM MGT COST STU	311	A	3.0	3.0		12.0
5601	AGRI CREDIT & FIN	333	B	3.0	3.0		9.0
5602	AGRICULTURAL COOP	450	C	3.0	3.0		6.0
5603	AGRIC PRICES	460	D	3.0	3.0		3.0
5604	AGRIC & EC DEVEL	465	A	3.0	3.0		12.0
5606	ANIMAL SCIENCE	121	B	3.0	3.0		9.0
				18.0	18.0		51.0

CUM. AVG.=2.833

NOTE
This is a report of grades for the student named for the period indicated. It is NOT an official transcript

REGISTRAR'S COPY

DOE, JOE ARTHUR | 75 | SPRING | 000006376 | ANIMAL

SOUTHERN UNIVERSITY

OFFICE OF THE REGISTRAR

BATON ROUGE, LOUISIANA 70813

C. H. CHAPMAN, Registrar

STUDENT GRADE REPORT

GRADES

A Excellent — AU Audit
B Good — P Passing
C Fair — I Incomplete
D Passed — WP Withdrew Passing
F Failure — WF Withdrew Failing

SEMESTER LEGEND

1 Fall Semester — 3 Summer Session
2 Spring Semester

70807

YEAR	SEMESTER	STUDENT NO	CLASSIFICATION	MAJOR AND COURSE
75	SPRING	000006376		ANIMAL

KEY	COURSE TITLE	NUMBER	GRADE	HOURS CARRIED	HOURS EARNED	HOURS FAILED	GRADE POINTS
5610	PRIN DAIRY SCIENC	213	D	3.0	3.0		3.0
5612	VET SCI (DISEASES)	321	B	3.0	3.0		9.0
5613	LIVESTOCK JUDGING	341	A	3.0	3.0		12.0
				9.0	9.0		30.0

CUM. AVG.=3.333

NOTE
This is a report of grades for the student named for the period indicated. It is NOT an official transcript

REGISTRAR'S COPY

DOE, JOHN EDWARD | 75 | SPRING | 000002627 | SPECIAL COMPUTER SCIENC

SOUTHERN UNIVERSITY

OFFICE OF THE REGISTRAR

BATON ROUGE, LOUISIANA 70813

C. H. CHAPMAN, Registrar

STUDENT GRADE REPORT

GRADES

A Excellent — AU Audit
B Good — P Passing
C Fair — I Incomplete
D Passed — WP Withdrew Passing
F Failure — WF Withdrew Failing

SEMESTER LEGEND

1 Fall Semester — 3 Summer Session
2 Spring Semester

YEAR	SEMESTER	STUDENT NO	CLASSIFICATION	MAJOR AND COURSE
75	SPRING	000002627		SPECIAL COMPUTER SCIENC

KEY	COURSE TITLE	NUMBER	GRADE	HOURS CARRIED	HOURS EARNED	HOURS FAILED	GRADE POINTS
5620	SOIL FERTILITY	305	D	3.0	3.0		9.0
5621	PLANT PATHOLOGY	307	B	3.0	3.0		12.0
5623	BEEF PRODUCTION	496	A	3.0	3.0		12.0
5624	INTRO TO AGRIC	110	D	2.0	2.0		6.0
	GENERAL SOILS	203	C	3.0	3.0		6.0
				14.0	14.0		45.0

BEST COPY AVAILABLE

Figure 14. Sample Output

VI. Software Inventories

The library of job-related software is a significant resource of the Southern University Computer Center. The software library is organized into three categories: Computer Job Inventory, Data Inventories, and JCL Sets Inventory.

The Computer Jobs Inventory is a listing of approval jobs (numbering 608 at this time) in order by job code. This listing is supported by a set of four indexes which allow identification and cross referencing of jobs alphabetically by job name, by run frequency, by application, and by program name. The existence of this Computer Jobs Inventory and the four Computer Job Indexes promotes efficient organization, scheduling, and execution of jobs cataloged in the S. U. Computer Center. The Computer Job Indexes are arranged by Alphabetic Job Name, Run Frequency, Application, and Program.

Data Inventories consist of card data files, source program decks, tape and disk files. Their use in the computer center promotes control of data flow and efficiency of job execution.

JCL (Job Control Language) Sets provide coded instructions to the computer control software for utilization of system hardware and software resources.

Waste in system resource time is avoided through the use of these debugged cataloged instructions. Samples *only* of the inventories described above are shown on the following pages of this section.

A. Computer Jobs Inventory

The Computer Jobs Inventory lists in sequential job code order all of the jobs maintained by the center. The inventory listing has the following format:

Job Code	Job Name	Program Name	FREQ	PROG FILE	APPL CODE

A one-page sample is shown in Figure 15.

Four indexes have been developed for cross referencing the Jobs inventory listing. Descriptions and samples of indexes appear in Appendix E.

Computer Jobs Inventory by Job Code

Job Code	Job Name	Program Name	Freq	Prog File	Appl Code		
J00010	Print A/P Permanent Vendor Roster	AC10535	Week	C0309	A/C	01	01
J00020	Print A/P Temporary Vendor Roster	AC10535	Week	C0309	A/C	01	01
J00030	Print Purchase Orders Listing	AC10565	Week	C0404	A/C	01	01
J00040	Sort All Trans File	Sort	Week	IBM	A/C	01	01
J00050	Print A/P Voucher Totals	AC10518	Week	C0301	A/C	01	01
J00060	Sort All Transaction Tape File	Sort	Week	IBM	A/C	01	01
J00070	Print Daily Acctg Trans Register	AC10510	Week	C0312	A/C	01	01
J00080	Sort A/P Invoices Y-T-D File	Sort	Week	IBM	A/C	01	01
J00090	Print Disbursements Report	AC10523	Week	C0308	A/C	01	01
J00100	Copy Allotments Disk File (D/T)	FU21047	Reqd	C0365	A/C	02	01
J00109	Update and Restore Allotment File	FU21047	Year	C0365	A/C	02	01
J00110	Copy Allotment Backup File to Disk	FU21047	Reqd	C0365	A/C	02	01
J00120	Print Allotment Cards	AC10553	Reqd	C0368	A/C	02	01
J00130	Print Budget Allotment Card Totals	AC10546	Reqd	C0362	A/C	02	01
J00140	Update Budget Allotment Disk File	AC10529	Reqd	C0369	A/C	02	01
J00160	Load Allotment 'Dummy' Orders	AC10508	Reqd	C0291	A/C	02	01
J00170	Load Allotment Cards to Tape	CDTP	Reqd	IBM	A/C	02	02
J00180	Sort Allotment Tape File	Sort	Reqd	IBM	A/C	02	02
J00190	Create Fund Allotment Records	AC10573	Reqd	C0418	A/C	02	02
J00200	Punch Fund Allotment Cards	TPCD	Reqd	IBM	A/C	02	02
J00210	Recreate A/P Employee Address File	AC10514	Reqd	C0120	A/C	03	01

Figure 15. Computer Jobs Inventory

B. Data Inventories

1. Card Data Files

Card Data Files contain input data for executable programs. The purpose of the Card Data Files inventory is to provide data control with a complete listing and the location of all Card Data Files maintained by the S. U. Computer Center. A sample of this list is shown in Figure 16.

The Card Data Files inventory has the following format:

File Code	File Name	Creation Date	File No.	Tray ID

The files are located in trays of file cabinets, which are identified by a file number; and the trays are identified by an alphabetic tray ID. The files are identified within trays by an index card. The index card precedes each card data file and contains the file code and the file name for identification. Some files are located in more than one tray and will be so indicated on the inventory listing (e.g., 3 L–M). The 3 L–M indicates that the file is located in file number 3 in trays L thru M. In some instances several different files are in the same tray. In such instances, the index card distinguishes between the various files.

2. Source Program Decks

Source Program Decks are original programs developed by programmers and compiled into executable programs. The inventory provides a complete listing and the location of all source program decks. It has the following format:

File Code	File Name	Program Name	File No.	Tray ID

The location of program decks follows the same scheme as the card data files. A sample Source Program Decks Inventory is shown in Figure 17.

3. Tape Files

Presently, there are approximately 620 active Tape Files maintained by the S. U. Computer Center. The Tape Files Inventory is listed in order by file code. The inventory (See Figure 18 for a sample listing) has the following format:

File Code	File Name	Internal Label

Card Data Files Inventory

01/31/75

File Code	File Name	Date Created	File	Tray
C5001	A/P Journal Voucher File	07-31-74	3	O-P
C5002	A/P Pay-In Voucher File	07-31-74	3	Q
C5003	A/P Invoice Disbursement Trans	07-31-74	3	R-S
C5004	A/P Purchase Order File	07-31-74	3	T
C5005	A/P Recon. & Check Register Updt.	03-31-74	3	T
C5006	High School/Parish & State Deck	07-31-74	3	T
C5007	Digest Address File	07-31-74	3	T
C5008	Economic Research Address File	07-31-74	3	T
C5009	HASP/RMT (Data-100) Deck	05-14-74	3	T
C5010	Chart-of-Accounts (Back-Up) File	06-30-74	4	A-C
C5011	P/R Outstanding Checks File	01-31-74	4	D
C5012	P/R Paid Checks File	01-31-74	4	E
C5013	Stu/Pr Outstanding Checks File	06-30-74	4	F
C5014	Stu/Pr Paid Checks File	06-30-74	4	G
C5015	Stu/Pr Check Register	07-31-74	4	H-I
C5016	Stu/Pr Invoice Disbursements	07-31-74	4	J
C5017	P/R Updates	08-05-74	4	K
C5018	P/R Invoice Disbursements	07-31-74	4	K
C5019	P/R Monthly Summary	08-05-74	4	K
C5020	P/R Deduction Totals	07-31-74	4	K
C5021	P/R Monthly State Retirement	07-31-74	4	K
C5022	P/R Bi-Weekly Overtime	07-31-74	4	K
C5023	P/R Check Reg. Bi-Weekly & Monthly	08-05-74	4	L-N
C5024	P/R Bi-Weekly Deductions	07-31-74	4	O
C5025	P/R Quarter Balances—Earnings	06-30-74	4	P-Q
C5026	Budget Unit Updates	07-31-74	4	S

Figure 16. Card Data Files Inventory

Source Program Decks Inventory

File Code	File Name	Program Name	File	Tray
C0001	Recreate Vendor File	FU21004	1	A
C0002	Print Pre-Registration Labels	R15043	1	A
C0003	Gang-Punch Bag—No CC 27-29 W/X'30'	R15044	1	A
C0004	Print Instructor Load Report	R15045	1	A
C0005	Print Student Load Report W/Totals	R15046	1	A
C0006	Load Reg/Create Classroll File	R15077	1	A
C0007	Load Tape to Pull Pre-Reg	R15047	1	A
C0008	Punch Midterm & Final Grade Cards	R15004	1	A
C0009	Eliminate 'W' Recs F/90-Pos Tapes	R15048	1	A
C0010	Pull Grad Srs or Fresh Records	R15049	1	A
C0011	Sequence New Number Into Tape	FU21005	1	A
C0012	Convert Class Master Schedule Card	R15050	1	A
C0013	Print Master Course Schedule	R15007	1	A
C0014	Print Registration Permits	R15017	1	B
C0015	List Student Master From Tape	R15051	1	B
C0016	Load Adds and Drops	R15052	1	B
C0017	Add-Up Utility	CTH60012	1	B
C0018	Update 90-Pos Schedule Tape W/Disk	R15053	1	B
C0019	Print Sund Address Labels	R15054	1	B
C0020	Gang-Punch Key CC 75-78 W/X'8'	R15055	1	B
C0021	Print Academic Labels W/Addresses	R15056	1	B
C0022	Post Grades on Stock Paper	R15057	1	B
C0023	Create Student Schedule Tape File	R15029	1	B
C0024	Print Dormitory Report	AC10550	1	B
C0025	Print Classrolls ('144' Pos Tape)	R15058	1	B

Figure 17. Source Program Decks Inventory

Tape File Inventory Listing

01/31/75

File Code	File Name	Internal Label
T9001	Acctg All Transactions File	Trans–Tape
T9002	A/P Bank Reconciliation File	Recon Tape File–H
T9003	A/P Check Register File	Recon Tape File–H
T9004	A/P Employee Address File	
T9006	A/P Fiscal Y-T-D Invoice File	A/P Hist File
T9007	A/P Paid Checks File	Reccn Tape–P
T9008	A/P Purchase Order File	Order-Tran-Tape
T9009	A/P Student Address File	A/P Student
T9010	A/P Transaction Card File	
T9011	A/P Vendor File (Perm)	Vendor–Perm
T9012	A/P Vendor File (Temp)	Vendor–Temp
T9013	Allotment File	Allotment–File
T9014	Academic Grade Average File	Average Pack
T9015	Aca. Reporting Stu. Addr File	
T9016	Alumni File	Alumni–File
T9017	Budget-Unit File	Budget–Unit
T9018	Chart of Accts Master File	
T9019	Current Semester Student Master	Student–Master
T9020	Curr. Semester Kits Master File	Student–Master
T9021	Del Tak Training Decks File	
T9022	Employment Security File	
T9023	Encumbrance Subsidiary File	Encumbrance–File
T9024	Expenditure Subsidiary File	Exp/Sub File
T9025	Expend & Encumb. Combined File	Combined–Exp/Ord
T9026	Faculty/Staff Directory File	
T9027	Faculty Evaluation File	

Figure 18. Tape File Inventory Listing 43

Some tape files are multi-volume, and some tape volumes (reels) have multiple files stored on them. The 520 active tape files include temporary, back-up, and hold files. Our inventory of tapes presently numbers 636 volumes. The 636 tapes are listed on a separate Tape Volumes Inventory, which does not appear in this book. The Tape Volumes Inventory listing, which is used as an operational document for referencing and retrieving tapes, has the following format:

Tape Code	File Name	As of Date	Date Created	Expiration Date	Status*

Maintaining the Tape Volumes Inventory is a dynamic process requiring frequent updates. For example, when updating a Tape File, a scratch tape is used to create a new file. The scratch tape then becomes the volume on which the updated file is stored. The scratch tape has a tape code different from the original tape on which the file was stored. The change in tape code of the updated file has to be recorded in order to keep the tape inventory listing updated. Again, this is important because the inventory is used to locate, file, and retrieve tape volumes from the storage racks.

In light of the demand for our tape volumes, we have plans to implement a tape maintenance and filing system that will eliminate the need to change tape codes for permanent Tape Files. The planned system will be designed so that a Tape File(s) will always have the same tape code regardless of the volume on which it is stored. This will make monitoring and retrieval of tapes less complicated and more efficient.

4. Disk Files

The Disk Files Inventory is a listing which shows location of disk and other pertinent information about disk files maintained by the S.U. Computer Center. The inventory (See Figure 19 for a sample listing) has the following format:

File Code	File Name	Internal Label	File Extents	Type & Units

(See Appendix B for type and unit codes table. See Glossary for definitions.)

5. JCL Sets

The JCL Sets Inventory is a listing which shows the file location of all job control cards used to execute the programs required to run the 608 computer jobs inventoried. The JCL Sets Inventory (See Figure 20 for a sample listing) has the following format:

---

*Status—The status of tapes are broken down into the following: permanent, temporary, hold, back-up, and scratch. See glossary for definitions.

Disk File Inventory

01/31/75

File Code	File Name	Internal Label	File Extents	Type Unit
D0001	Kit Master Disk	Kit Master	4104-6084	I-160
D0002	General Disk	Gen—Ledger	6084-6348	I-160
D0003	A/P Student Address File	A/P Student Address File	6348-7428	I-160
D0004	A/P Employee Address File	A/P Employee Address File	7428-7740	I-160
D0005	Budget—Unit—Record File	Budget—Unit Record	7740-7836	I-160
D0006	A/P Purchase Order File	A/P Purchase Order File	0648-1188	I-161
D0007	A/P Vendor File (Perm)	A/P Vendor File—Perm	1188-1812	I-161
D0008	A/P Vendor File (Temp)	A/P Vendor File—Temp	1812-2232	I-161
D0009	Space File	Space File	2232-3168	I-161
D0010	N.D.S.L Master File	NDL Master	3168-3852	I-161
D0011	Chart-of-Accounts Master	Mast—Code	3852-4500	I-161
D0012	Allotment File	Allotment File	4500-5028	I-161
D0013	P/R Master Disk File	PR—Master—Disk	5043-6012	I-161
D0014	Work—Area	Work—Area	4860-8040	S-162
D0015	Curr Semester Student Mast	Kit Master	4104-6084	I-160
D0016	Curr Sem University Schedu	CLS Sched	6272-7284	I-161
D1001	Exp and P/O Subsidiaries	Exp and Ord Sub File	5000-8000	S-162
D1002	Pre-Registration File	Registration	4380-4860	S-162
D1003	Registration File	Registration	4380-4860	S-162
D1004	Master Schedule Cards	Grade—Admit	4380-4860	S-162
D1005	Student Master History Fil	Kit Master	4104-6084	I-162
D1006	Room Utilization File	Wrkspace	3168-5076	I-162
D1007	High School Table	Hi/Sch-File	4380-4860	S-162
D1008	Payroll Deduction File	PR—Deduction—A	4380-5220	S-162
D1009	P/R Teacher Retirement	PR—Deductions—B	5220-6060	S-162
D1010	A/P Bank Reconciliation	Recon Disk File	4860-8340	S-162

Figure 19. Disk File Inventory

Job Control Sets (JCL) Inventory by Set Code

File Code	Job Name	Program Name	File Tray
S00010	Print A/P Permanent Vendor Roster	AC10535	2–F
S00020	Print A/P Temporary Vendor Roster	AC10535	2–F
S00030	Print Purchase Orders Listing	AC10565	2–F
S00040	Sort All Trans File	Sort	2–F
S00050	Print A/P Voucher Totals	AC10518	2–F
S00060	Sort All Transaction Tape File	Sort	2–F
S00070	Print Daily Acctg Trans Register	AC10510	2–F
S00080	Sort A/P Invoices Y-T-D File	Sort	2–F
S00090	Print Disbursements Report	AC10523	2–F
S00100	Copy Allotments Disk File (D/T)	FU21047	2–F
S00109	Update and Restore Allotment File	FU21047	2–F
S00110	Copy Allotment Backup File to Disk	FY21047	2–F
S00120	Print Allotment Cards	AC10553	2–F
S00130	Print Budget Allotment Card Totals	AC10546	2–F
S00140	Update Budget Allotment Disk File	AC10529	2–F
S00160	Load Allotment 'Dummy' Orders	AC10508	2–F
S00170	Load Allotment Cards to Tape	CDTP	2–F
S00180	Sort Allotment Tape File	Sort	2–F
S00190	Create Fund Allotment Records	AC10573	2–F
S00200	Punch Fund Allotment Cards	TPCC	2–F
S00210	Recreate A/P Employee Address File	AC10514	2–F
S00211	Back-up A/P Student Address File	FU21004	2–F
S00212	Restore A/P Student Address File	FU21004	2–F
S00220	Create A/P Student Addresses	FU21051	2–F

Figure 20. JCL Inventory by Set Code

File Code	File Name	Program Name	File Tray

The JCL Sets are located in trays of file cabinets. The cabinets are identified by a file number and the trays are identified by an alphabet. Because individual JCL Sets are usually small, these sets are identified within trays by index cards which separate the sets into blocks of 10. For example, a typical index card has S00010–S00019 typed on it, indicating that the 10 JCL Sets in that range are filed between this index card and the next one in the tray. Each individual JCL Set within a block of 10 is identified by an orange punched card containing the file code and the job name it executes.

APPENDIX A

Disk "Type and Unit" Codes Table

Type

Code	Meaning
D	Direct Access Method
I	Indexed Sequential Access Method
S	Sequential Access Method
V	Virtual Storage Access Method

Unit

160	SYSRES–System Residence
161	SYSPVT–System Private Library
162	SYSWRK–System Work Area

APPENDIX B

Application Codes Table

Major Application Codes

Code	Application
A/C0000	Accounting
G/A0000	General Administration
G/R0000	Grades
INV0000	Inventory
OTH0000	Miscellaneous
P/R0000	Payroll
R/G0000	Registration

Minor Application Codes

Code	Application
A/C0100	Monday Morning ACCTG Reports
A/C0200	Budget Allotments
A/C0300	A/P Vendor File Maintenance
A/C0400	Edit and File ACCTG Transactions
A/C0500	A/P Check Records Processing
A/C0600	Monthly Accounting Reports
A/C0700	Budget Unit File Maintenance
A/C0800	Subsidiary Accounting
A/C0900	A/P Bank Reconciliation
A/C1000	Chart of Accounts
A/C1100	Meal Cards Issued
A/C1200	Natl. Defense Student Loans
A/C1300	Registration Fees Reporting
A/C1400	Telephone Charges Dept
G/A0100	A-C-T Scores Report
G/A0200	Alumni Reporting
G/A0300	Classified Personnel Reports
G/A0400	Seniors Graduated Roster
G/R0100	Grade Reporting–SUBR
G/R0200	Grade Reporting–SUNO
INV0100	Bookstore Reporting
INV0200	Central Stores Reports
OTH0100	Auto-Scout Reporting
OTH0200	Program Compilations

Code	Application
OTH0300	Convert/Compile Programs OS to DOS
OTH0400	Black Business ADDR Labels
OTH0500	File Collator Simulation
OTH0600	Initialed Tape/Disk Volumes
OTH0700	Misc. Addr. Labels Printing
OTH0800	Copy/Restore Tape/Disk
OTH0900	File Utility Operations
P/R0100	Employees Payroll
P/R0200	Student Payroll
R/G0100	Registration–SUNO
R/G0200	Registration–SUSB
R/G0300	Registration–SUBR
R/G0400	Classroll Preparation–SUBR
R/G0500	Registration Prep/Reporting–SUBR

Sub-Application Codes

Code	Application
A/C0101	Monday Morning ACCTG Reports
A/C0201	Budget Allotments
A/C0202	Create Fund Allotments
A/C0301	A/P Vendor File Maintenance
A/C0401	Cash Receipts Transactions
A/C0402	Journal Voucher Transactions
A/C0403	Disbursement Transactions
A/C0404	Purchase Order Transactions
A/C0405	Postal Charges Transactions
A/C0501	A/P Check Writing
A/C0601	ACCTG Transactions Register
A/C0602	Disbursements Verification Report
A/C0603	Journals and General Ledger
A/C0604	General Ledger Reporting
A/C0605	Expenditures and Encumbrances
A/C0701	Budget Unit File Maintenance
A/C0801	Subsidiary Accounting
A/C0901	A/P Checks Paid by Bank by Date
A/C0902	A/P Checks Register
A/C0903	A/P Bank Reconciliation Reports
A/C1001	Chart of Accounts
A/C1101	Meal Cards Issued
A/C1201	NDSL Repayment Schedules (Exits)
A/C1202	NDSL Files Updating
A/C1203	NDSL Reporting
A/C1301	Registration Fees Reporting
A/C1302	Registration Fees Analysis

Code	Application
A/C1401	Telephone Charges (Dept.)
G/A0101	A-C-T Scores Report
G/A0201	Alumni Reporting
G/A0301	Classified Personnel Reports
G/A0401	Senior Graduated Roster
G/R0101	Student Grade Reporting
G/R0102	Permanent Record Posting Labels
G/R0103	Grade Point Avg. Listings/Labels
G/R0104	Graduating Seniors
G/R0105	Incomplete (I) Grades
G/R0106	Analysis of Grades
G/R0201	Create/Update Student Master File
G/R0202	Student Grade Reporting
G/R0203	Grade Point Average Listing
G/R0204	Grade Distribution Report
INV0101	Bookstore Reporting
INV0201	Inventory Worksheets
INV0202	Central Store Charges for Issues
INV0203	Central Stores Inventory Reports
OTH0101	Auto-Scout Reporting (Football)
OTH0201	Program Compilations
OTH0301	Convert/Compile Programs OS-to-DOS
OTH0401	Black Business Addr. Labels
OTH0501	File Collator/Simulation
OTH0601	Initialized Tape/Disk Volumes
OTH0701	Misc. Addr. Labels Printing
OTH0801	Copy/Restore Tape/Disk
OTH0901	File Utility Operations
P/R0101	Faculty/Staff Directory
P/R0102	Bank Reconciliation
P/R0103	Payroll File Sorts/Proofs
P/R0104	Files Updates–New Employees
P/R0105	Regular P/R Master File Updates
P/R0106	Create Current Payroll Files
P/R0107	Payroll Summaries Report
P/R0108	Payroll Voucher/Disbursement Report
P/R0109	Payroll Attendance/Time Sheets
P/R0110	Dept. Payroll Checks In-Out Roster
P/R0111	Checks/Registers Printing
P/R0112	Payroll Deducations Reports
P/R0113	Employee Payroll REF Rosters
P/R0114	Payroll Overtime Reports
P/R0115	Payroll Status Report
P/R0116	Teacher Retirement System Report
P/R0117	Payroll Quarterly Reports
P/R0118	Employment Security Report

Code	Application
P/R0119	Payroll Calendar Year Report
P/R0120	Payroll Fiscal Year Reports
P/R0121	Payroll Special Jobs
P/R0201	Bank Reconciliation Reporting
P/R0202	Time/Earnings Edit/Proof
P/R0203	Check Writing
P/R0204	Stu. P/R Monthly Time Card Punching
P/R0205	Stu. P/R Aid Authorization Reports
R/G0101	Registration–SUNO
R/G0201	Registration–SUSB
R/G0301	UPDT STU SCHD File W/Pre-Reg SCHD
R/G0302	Create Regular Student SCHED File
R/G0303	Process 'Adds' to Stu. Sched. File
R/G0304	Process 'Drops' to Stu. Sched. File
R/G0401	Senior Classrolls/Grade Cards
R/G0402	Regular Classrolls/Grade Cards
R/G0403	Special Classrolls (Stock Paper)
R/G0404	Classrolls Check-In/Out Rosters
R/G0501	Prepare Student Pre-Reg Forms
R/G0502	Class Limit CTL Rosters/Univ. Sched
R/G0503	Prepare Grade/Admit Cards
R/G0504	Create Current Student Master File
R/G0505	Update Current Student Master File
R/G0506	Prepare Stu. Registration Kits
R/G0507	Process Preregistration
R/G0508	Space Utilization Reporting
R/G0509	Prepare University Schedule
R/G0510	University Schedule File Maint.
R/G0511	University Schedule for Printer
R/G0512	Student Schedule File Maint.
R/G0513	Official Enrollment Reporting
R/G0514	Student Schd. Load Reporting
R/G0515	Hegis Schedule
R/G0516	Faculty Schd/Enrollment Load
R/G0517	Geographic Enrollment Reporting
R/G0518	Misc. Registration Reporting

APPENDIX C

Run Frequency Table

Mnemonic	Meaning
DAY	Daily
WEEK	Weekly
BIWK	Biweekly
MTH	Monthly
QTLY	Quarterly
SIAN	Semiannually
YEAR	Annually
REQD	As Requested
SMST	Semester

APPENDIX D

Table of Program Execute Names

The program codes are code names programmers assign to executable programs for filing purposes. These codes follow a scheme designed to indicate the application of the program, such as Accounting–AC10535, Registration–R15097, etc. These programs are responsible for the execution of the jobs maintained by the center.

A similar, but divorced, coding scheme has been developed for the computer jobs, such as Accounting–A/C0102, Registration–R/G0103, etc. Ideally, these two coding schemes should be compatible to the point of having the same indicated application. Unfortunately, this is not the case in all instances. A project has been initiated for the purpose of making these two coding schemes compatible.

Program Execute Name	Program Descriptive Name
AC10507	Check Roster (Fund/Invoice-Fund)
AC10508	Load Dummy Allot Rec on Ord Tape
AC10509	Budget Unit Record Update
AC10510	Edit/Bal Cash Receipts
AC105100	Vendor Payment Report
AC105101	Create Receipt Cards
AC105102	Create P/O File From Cards
AC105103	Create Employee Earnings TP-Reg FL
AC105104	Create Employee Earnings Tape-AP FL
AC105105	Employee Earnings Report
AC105106	Create General Ledger Summary Tape
AC10511	Purchase Order Proof
AC10512	A/P Vendor Address File Update
AC10513	A/P Student Address File Update
AC10514	A/P Address Creation
AC10515	Edit/Bal A/P Invoices
AC10516	Create Checks File
AC10517	Write A/P Check
AC10518	A/P Voucher Total
AC10519	Add to Exp/Ord Tape
AC10520	A/P General Ledger Update
AC10521	Summary Exp/Orders
AC10522	A/P Budget Reporting
AC10523	A/P Disbursement List (Alpha)
AC10524	A/P Check Register Report Y-T-D

APPENDIX E

Computer Job Indexes

There are four Computer Job Indexes:

1. Alphabetic–in alphabetical job name order.
2. Run Frequency–in run frequency order, i.e., daily, weekly, biweekly, etc.
3. Application–in major application order, i.e., Accounting, General Administration, etc.
4. Program–in alpha/numeric order by execution name.

Each index lists the computer jobs in the order indicated, and each index points to the job descriptions which are ordered by job code.

Computer Jobs Inventory indexed alphabetically

Job Name	Freq	Appl Code			Job Code
Add Emp to P/R Master File A-1	Biwk	P/R	01	04	J02830
Add Emp to P/R Master File A-2	Biwk	P/R	01	04	J02840
Add Hours Carried to Curr/Semester	Smst	R/G	05	13	J05390
Add New Emp to P/R Master File P-1	Biwk	P/R	01	04	J02810
Add New Emp to P/R Master File P-2	Biwk	P/R	01	04	J02820
Add Records to Kit Master File	Reqd	R/G	05	06	J04820
Add Student Hours to Curr Sem Mstr	Smst	R/G	05	05	J04670
Add to the Employee Directory File	Year	P/R	01	01	J02680
Add Total Students to Schd Mstr	Smst	R/G	05	16	J05610
Adjust P/R Master Sal Paid-to-Date	Reqd	P/R	01	21	J03670
Alumni File Update	Reqd	G/A	02	01	J01517
Back-Up A/P Student Address File	Reqd	A/C	03	01	J00211
Backup NDSL Master File	Mth	A/C	12	03	J01200
Branch Grade Distribution	Smst	G/R	02	04	J02070
Card Reproduce Simulator	Reqd	OTH	09	01	J02590
Change Employee Directory Records	Year	P/R	01	01	J02700
Classified Personnel List	Reqd	G/A	03	01	J01530
Code/Assign Alumni Records Keys	Reqd	G/A	02	01	J01516
Compare Grad Sr Grades Out vs In	Smst	G/R	01	01	J01630
Compare P/R Cal-Earn with P/R Mstr	Year	P/R	01	19	J03530
Compare P/R Master with Emp Directory	Year	P/R	01	01	J02710
Compare P/R Qtr-Ern with P/R Mstr	Qtly	P/R	01	17	J03470
Compile Only Convert Stu-Prog	Reqd	OTH	03	01	J02440
Compute Employee Salary Increases	Reqd	P/R	01	20	J03570

Computer Jobs Inventory indexed by frequency

Run Frequency	Job Name	Appl Code			Job Code
Daily	Create A/P Checks-Writing File	A/C	05	01	J00430
Daily	Edit Budget Unit Record Updt Cards	A/C	07	01	J00730
Daily	Edit Cash Receipt Transactions	A/C	04	01	J00270
Daily	Edit Purchase Order Transactions	A/C	04	04	J00340
Daily	Edit/Balance A/P Invoices	A/C	04	03	J00320
Daily	Edit/Balance Journal Entries	A/C	04	02	J00310
Daily	File Cash Receipt Transactions	A/C	04	01	J00280
Daily	File Disbursment Transactions	A/C	05	01	J00490
Daily	File Encumbrance Transactions	A/C	04	04	J00360
Daily	File Journal Voucher Entries	A/C	04	02	J00300
Daily	File Purchase Order Transactions	A/C	04	04	J00350
Daily	Print A/P Checks Roster	A/C	05	01	J00480
Daily	Print A/P Transactions Register	A/C	05	01	J00450
Daily	Sort A/P Daily Checks File	A/C	05	01	J00440
Daily	Sort A/P Daily Checks File W/Nos	A/C	05	01	J00470
Daily	Sort A/P Daily Invoices Work File	A/C	05	01	J00420
Daily	Update A/P Student Address File	A/C	03	01	J00250
Daily	Update A/P Vendor Address Files	A/C	03	01	J00260
Daily	Update Budget Unit Record File	A/C	07	01	J00740
Daily	Write A/P Checks	A/C	05	01	J00460
Daily	Electronic Circuit Analysis Prog	OTH	02	01	J02280
Daily	Load Accounting Table	OTH	02	01	J02290
Daily	Report Generator Program	OTH	02	01	J02300
Daily	Student Program Jobs	OTH	02	01	J02350

The format of the Application Index follows:

	Freq.	Appl.	Job Code
(XXX) MAJOR APPLICATION			
99 MINOR APPLICATION			
99 SUB-APPLICATION			
Jobs	--	--	--
.	--	--	--
.	--	--	--
.	--	--	--
.	--	--	--
.	--	--	--

Example

	Freq.	Appl.	Job Code
(A/C) ACCOUNTING JOBS			
01 Monday Morning Acctg Reports			
01 Monday Morning Acctg Reports			
Print A/P Permanent Vendor Roster	Wkly	A/C	J00010
.	.	.	.
.	.	.	.
.	.	.	.
etc.	etc.	etc.	etc.

Application Coding Scheme

AAA XX XX

Example:	Meaning:
A/C0201	A/C – *Major Application* code ACCOUNTING. 02 – *Minor Application* code meaning 2nd application title under major application ACCOUNTING. 01 – *Sub-application* meaning 1st application title under minor application 02.

Computer Jobs Inventory indexed by application

	Freq.	Appl.	Job Code
(A/C) ACCOUNTING JOBS			
01 Monday Morning Acctg Reports			
01 Monday Morning Acctg Reports			
Print A/P Permanent Vendor Roster	Week	A/C	J00010
Print A/P Temporary Vendor Roster	Week	A/C	J00020
Print Purchase Orders Listing	Week	A/C	J00030
Sort All Trans File	Week	A/C	J00040
Print A/P Voucher Totals	Week	A/C	J00050
Sort All Transaction Tape File	Week	A/C	J00060
Print Daily Acctg Trans Register	Week	A/C	J00070
Sort A/P Invoices Y-T-D File	Week	A/C	J00080
Print Disbursements Report	Week	A/C	J00090
01 Budget Allotments			
02 Budget Allotments			
Copy Allotments Disk File (D/T)	Reqd	A/C	J00100
Update and Restore Allotment File	Year	A/C	J00109
Copy Allotment Backup File to Disk	Reqd	A/C	J00110
Print Allotment Cards	Reqd	A/C	J00120
Print Budget Allotment Card Totals	Reqd	A/C	J00130
Update Budget Allotment Disk File	Reqd	A/C	J00140
Load Allotment 'Dummy' Orders	Reqd	A/C	J00160
02 Create Fund Allotments			
Load Allotment Cards to Tape	Reqd	A/C	J00170
Sort Allotment Tape File	Reqd	A/C	J00180
Create Fund Allotment Records	Reqd	A/C	J00190
Punch Fund Allotment Cards	Reqd	A/C	J00200
03 A/P Vendor Files Maintenance			
01 A/P Vendor File Maintenance			
Recreate A/P Employee Address File	Reqd	A/C	J00210
Back-Up A/P Student Address File	Reqd	A/C	J00211
Restore A/P Student Address File	Reqd	A/C	J00212
Create A/P Student Addresses	Smst	A/C	J00220
Create A/P Student Address File	Smst	A/C	J00230
Create A/P Student Address File	Smst	A/C	J00240
Update A/P Student Address File	Day	A/C	J00250
Update A/P Vendor Address Files	Day	A/C	J00260

	Freq	Appl	Job Code
Print List-2 of Seniors Graduated	Smst	G/A	J01570
Re-Sort File of Seniors Graduated	Smst	G/A	J01580
Print List-1 of Seniors Graduated	Smst	G/A	J01590
Print List-3 of Seniors Graduated	Smst	G/A	J01600
(G/R) GRADE REPORTING JOBS			
01 Grade Reporting–SUBR			
01 Student Grade Reporting			
Load Subr–Grade Cards	Smst	G/R	J01610
Sort Graduating Senior Grades	Smst	G/R	J01620
Compare Grad Sr Grades Out vs In	Smst	G/R	J01630
Update Subr-Grade w/Stu Master	Smst	G/R	J01640
Update Grades w/Withdrawals	Smst	G/R	J01650
Sort Subr-Grade File (T/T)	Smst	G/R	J01660
Print Subr-Grade Report Forms	Smst	G/R	J01670
Print Grades on Stock Paper	Smst	G/R	J01680
Print Grade Verification Rolls	Smst	G/R	J06660
02 Permanent Record Posting Labels			
Sort Graduating Sr Grades Alpha	Smst	G/R	J01690
Print Posting Grade Labels	Smst	G/R	J01700
03 Grade Point Avg Listings/Labels			
Run Average Reports	Smst	G/R	J01710
Print Academic Address Labels	Smst	G/R	J01720
04 Graduating Seniors			
Load Graduating Senior Grades	Smst	G/R	J01730
Update Grad Sr Grade w/Stu Master	Smst	G/R	J01740
Update Grad File with Withdrawals	Smst	G/R	J01750
Sort Grad Sr Grade File (T/T)	Smst	G/R	J01760
Print Summer Grade Report Forms	Year	G/R	J01765
Print Grad Senior Grade Reports	Smst	G/R	J01770
05 Incomplete (I) Grades			
Load Schedule-1 Grades (T/D)	Smst	G/R	J01780
Load History Student Master	Smst	G/R	J01790
Load-1 Grades to Tape	Smst	G/R	J01800
Update 1-Grade w/Student Master	Smst	G/R	J01810
Sort 1-Grade File (T/T)	Smst	G/R	J01820
Print 1-Grade Report Forms	Smst	G/R	J01830
Create Incomplete Grade Tape File	Smst	G/R	J01838
Sort 1-Grades–Classroll Order	Smst	G/R	J01839
Print Incomplete Grade Report	Smst	G/R	J01840

	Freq	Appl	Job Code
06 Analysis of Grades			
Sort Current Sem Grade Tape	Smst	G/R	J01850

Program Name	Job Name	Freq	Appl Code			Job Code
ACA0520	Print Cash Journal	Mth	A/C	06	03	J00550
ACCTC	Student Programs (BUS & ACCT)	Day	OTH	02	01	J02310
ACCTZ	Load Accounting Table	Day	OTH	02	01	J02290
AC10508	Load Allotment 'Dummy' Orders	Reqd	A/C	02	01	J00160
AC10508	File 'Dummy' Enc Subsid-New Allot	Mth	A/C	06	05	J00655
AC10509	Update Budget Unit Record File	Day	A/C	07	01	J00740
AC10510	Print Daily Acctg Trans Register	Week	A/C	01	01	J00070
AC10510	Edit Cash Receipt Transactions	Day	A/C	04	01	J00270
AC10510	File Cash Receipt Transactions	Day	A/C	04	01	J00280
AC10510	File Journal Voucher Entries	Day	A/C	04	02	J00300
AC10510	Edit/Balance Journal Entries	Day	A/C	04	02	J00310
AC10510	File Disbursement Transactions	Day	A/C	05	01	J00490
AC10510	Print Register–Daily Acctg Trans	Mth	A/C	06	01	J00520
AC10511	Edit Purchase Order Transactions	Day	A/C	04	04	J00340
AC10511	File Purchase Order Transactions	Day	A/C	04	04	J00350
AC10511	File Encumbrance Transactions	Day	A/C	04	04	J00360
AC10512	Update A/P Vendor Address Files	Day	A/C	03	01	J00260
AC10513	Update A/P Student Address File	Day	A/C	03	01	J00250
AC10514	Recreate A/P Employee Address File	Reqd	A/C	03	01	J00210
AC10515	Edit/Balance A/P Invoices	Day	A/C	04	03	J00320
AC10515	File Invoice Transactions	Reqd	A/C	04	03	J00330
AC10516	Create A/P Checks-Writing File	Day	A/C	05	01	J00430
AC10516	Print A/P Transactions Register	Day	A/C	05	01	J00450
AC10516	Print A/P Checks Roster	Day	A/C	05	01	J00480

APPENDIX F

Glossary

ALPHABETICAL INDEX: An index that lists the computer jobs in alphabetical order.
APPLICATION INDEX: An index that lists the computer jobs in major application order.
AS-OF-DATE: Date on which a file was last run or the last date of data reception.
BACK-UP TAPE FILE: Tape data file, used as a security measure, that backs up temporary and permanent tapes.
BRIEF: A short description of what a job does.
CREATION DATE: Date on which a file was created.
DATA CONTROL: The computer operations section that receives, reviews, maintains control on, and sets up input and jobs for computer processing; reviews outputs to see that they meet job requirements; and distributes them to users.
DIRECT ACCESS METHOD: An access method pertaining to a storage device whose access time is not significantly affected by either the location of the data to be read or by the location to which data is to be written.
DISK EXTENTS (EXTENTS): The physical track locations of files located on disks.
EXPIRATION DATE: Date on which a file or the contents of a file is no longer useful.
FILE CODE: An alpha/numeric code that identifies a file.
FILE NUMBER: A number that identifies the cabinet in which a card data file is located.
HOLD TAPE FILE: A tape file (usually a one-time project file) that is kept on the tape medium until notification of its expiration, at which time it becomes a scratch tape file.
INDEXED SEQUENTIAL ACCESS METHOD: An access method that permits direct access to individual records of an indexed sequential file arranged in logical sequence by key.
INTERNAL LABEL: The file identification name that is physically assigned to disk and tape files for system verification.
I/O FILE NAME: A name describing input and output data.
JOB CODE: An alpha/numeric code that identifies a job.
JOB CONTROL CARDS (JCL SETS): Sets of statements used to direct operating-system programs that control processing.
JOB DESCRIPTIONS: One-page summaries containing job identification, job application, job description, reference information, and scheduling information.
JOB RUN FILE: A file containing job run sheets used by operators for instructions to perform computer processing functions.
JOB RUN SHEET: A sheet containing all computer processing instructions used by operators for computer processing and used by data control for preparing jobs for computer processing.
OPERATOR: A person who operates the computer and monitors systems performance by means of a console and on-line terminals. Operator also ensures that input data and files are entered as required in order to maintain production schedules.
OPERATOR INSTRUCTIONS: Instructions that inform the operator about pre-run conditions, abnormal end of job procedures, and file dispositions.

OPERATOR MESSAGES: Messages in the form of console displays and responses.

OPERATOR NOTES: Notes describing future program and operational changes required and/or any special notes pertinent to the successful run of a job.

PERMANENT TAPE FILE: A tape file that is an established file with an expiration date of five years or more.

PROGRAM EXECUTE NAME (PROGRAM NAME): The code name that a program is cataloged under in the computer library.

PROGRAM EXECUTE NAME INDEX (PROGRAM INDEX): An index in alphabetical program execute name order.

PROGRAM FILE NUMBER (PROG. FILE): The code name that source program card data decks are filed under in the computer library.

RUN FREQUENCY (FREQUENCY CODE): Alphabetic code representing how often a job is run.

RUN FREQUENCY INDEX: An index in run frequency order.

RUN TIME: Represents how long it takes for a job to run on the computer.

SCRATCH TAPE FILE: Tape file that is available as a work area.

SEQUENTIAL ACCESS METHOD: An access method pertaining to a storage device in which there is a sequential relationship between the access times and successive locations.

SOURCE LANGUAGE: Computer programming language in which a program is written.

STATUS: Denotes whether a tape file is permanent, temporary, back-up, hold, or scratch.

SYSTEM RESIDENCE: A storage unit on which operating system programs are stored so that they can be loaded into main storage at appropriate time.

SYSTEM PRIVATE LIBRARY: A storage unit on which operating system programs and user programs are stored so that they can be loaded into main storage upon assignment.

SYSTEM WORK AREA: Temporary storage area that the system uses when needed.

TEMPORARY TAPE FILE: A tape file with a life span of five years or less.

TRAY ID: The cabinet tray location in which card files are located.

TYPE AND UNIT: The method in which a file is accessed from the disk and the unit on which the file resides.

VIRTUAL STORAGE ACCESS METHOD: An access method for direct or sequential processing of fixed and variable length records on direct access devices.